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1952 SEASON

## COKER'S PEDIGREED TOBACCO SEED

1951 BREEDER'S FOUNDATION STOCK

A field of Coker's Golden Cure—a new tobacco variety we are introducing this fall. Shown in photo on left: Mr. J. V. Williamson, in charge of tobacco seed production. Right: Dr. C. H. Rogers, Head Pathologist in charge of our tobacco seed disease breeding work.



## COKER'S PEDIGREED SEED COMPANY

Hartsville

COKER'S PEDIGREED SEED ABLOOD

**South Carolina** 

The South's Foremost Seed Breeders.

#### TO TOBACCO GROWERS OF THE FLUE-CURED BELT:



Geo. J. Wilds President

It gives us great pleasure to present to you this copy of our 1951-52 Tobacco Seed Catalog in which you will find accurate descriptions and specific recommendations. Please read carefully and select the variety best suited to your particular conditions.

Our tobacco breeders are practical tobacco growers, men reared on tobacco farms, with long experience, scientific training and a vast store of know-how.

You can follow their recommendations with safety and assurance. These men bred Coker's Gold Dollar, Coker's Mammoth Gold, Coker's Golden Harvest, Coker's Golden Wilt, and our latest tobacco, introduced first this fall, Coker's Golden Cure.

These tobaccos have been bred to bring the farmer the maximum net dollars per acre. We are keenly aware of the fact that disease resistance in itself is not enough, that it is valuable only to the extent that it increases the net dollar per acre income. We insist always on the highest possible quality, plus production, combined with a high tolerance to disease. Our aim is to please our customers. We invite you to visit our Company and inspect our farms and breeding experiments.

With every good wish for 1952,

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Sincerely,

Twilde

President

Our stock of tobacco seed for the 1952 planting season, including twelve popular varieties, is the best and most complete we have ever offered. We are pleased to be able to announce to our customers the introduction of a new cigarette type variety, Coker's Golden Cure, which is the easiest tobacco to cure we have ever bred or tested, and produces top yield of uniformly high quality tobacco. Further information on this variety is given beginning on page four.



Robert R. Coker Vice-President

Since the best tobacco seed obtainable costs no more per acre than a pound of good quality tobacco will bring, it does not seem wise to try to save a few cents per acre on this essential item by buying anything but the best.

Our Company was the first commercial organization to begin scientific plan-to-row breeding with flue-cured tobacco varieties, the first to offer purebred, dependable, high quality seed and to pioneer in improved methods of cleaning, treating and packaging.

Every ounce of seed which we sell is grown on our farms, under the direct and personal supervision of our tobacco experts and all are processed, treated, and packaged in the most careful and scientific manner possible. We offer them to you in the belief that they will add to the satisfaction, assurance, and profits of your tobacco growing operations.

Sincerely yours.

Robuth. Cokr

Vice-President

Showing a section of one of our tobacco breeding nurseries where thousands of plants are selected and bagged each year in our program of breeding better and more disease resistant cigarette tobaccos.



# BREEDING RESEARCH FOR IMPROVED DISEASE RESISTANCE, YIELD AND QUALITY

By

C. H. ROGERS, Ph.D., Plant Pathologist

During the past quarter of a century the breeding efforts of Coker's Pedigreed Seed Company to incorporate and stabilize excellent growth and smoking qualities in flue-cured varieties of tobacco have contributed to a notable improvement in the appearance, yield and quality of the crop of the Bright Belt. Tobacco breeders of the Company have screened and utilized all available material in advancing this program.

## PLANT DISEASES—A MAJOR PROBLEM OF TOBACCO GROWERS

The occurrences and rapid spread of virulent diseases such as black shank, Granville wilt and Fusarium wilt, together with the universal presence of root infesting nematodes has intensified the breeding of tobaccos which will withstand losses from these diseases that, all together, amount to 15 per cent or more of each year's crop, or nearly \$100,000,000 annually. Included in our breeding material are reselected lines from standard varieties, crosses or hybrids between these varieties, and crosses between varieties and non flue-cured types that carry resistance to one or more diseases. For example, fairly high resistance, or tolerance, to black shank is obtained from a cigar wrapper type. In other cases, resistance to one or more specific diseases has come from introductions from foreign countries. Some of this material has been furnished by State or Federal agencies.

## DISEASE BREEDING WORK RECEIVING MAJOR EMPHASIS

Selected plant material from hundreds and thousands of crosses has been rigidly tested on the most severely disease-infested soils available. Continued selecting and crossing is done not only to work toward high disease resistance, but to improve yield and smoking qualities. Our nurseries include hundreds of kinds (or lines) and, within these, thousands of plants are bagged each year to prevent unknown crossing. Primings are taken from individual plants and tagged and cured to evaluate quality of leaf as it would be placed on the warehouse floor. Advance material that shows disease resistance and improved quality is placed in replicated comparative yield trials. Before releasing a new variety of tobacco to growers, it is tested for at least three years under such conditions, and is also grown on different farms



Dr. C. H. Rogers, author of this article, is shown here studying an individual plant selection of Coker's Golden Cure, our newest tobacco variety.

over a wide area in the flue-cured belts. In cooperation with one of the leading manufacturers, our most promising tobaccos are subjected to chemical analysis and processing to determine cigarette manufacturing qualities.

#### BLACK SHANK

We are emphasizing particularly the breeding work on black shank and are utilizing three different severely infested locations, as well as plots artificially inoculated with the disease. Greenhouse facilities are also used to hasten breeding for high resistance to this disease. We hope that within about two or three years we shall be able to offer to the grower a variety, or varieties, derived from this black shank breeding work.

Our present program includes over 2,000 varietal and hybrid lines in 10 nurseries at Hartsville, and other locations in North and South Carolina, on severely disease-infested soil; 45 advanced lines or varieties in comparative yield and quality tests, and 12 varieties for current sales stock.

Our aim is to incorporate resistance to the major diseases, high yield, and top smoking quality in single varieties of tobacco that are well adapted to a wide range of growing conditions.

# Coker's GOLDEN CURE '51

1951 BREEDER'S REGISTERED SEED

A New Pedigreed Variety of Wide Adaptability—Combining Ease of Curing, Desirable Leaf Spacing and Ability to Produce High Yields of Top Quality Tobacco

This new hybrid variety of tobacco was developed from a cross of Ducane, an old flue-cured variety grown in Canada and the Old Belt of North Carolina, and a USDA introduction from South America called T.I. 706. Selected plants were back-crossed twice to the Ducane parent to improve quality and yield. Plants resulting from these series of crosses have been reselected and inbred on heavily infested nematode soil, both in the field and greenhouse, for seven generations. The 706 carries some resistance to root infesting nematodes. Golden Cure, therefore, has some resistance to these parasites causing root knot and other troubles.

BELOW: Inspecting this pile of Golden Cure, which sold for 75 cents per pound, are left to right: Robert R. Coker, Vice-President; Dr. C. H. Rogers, Head Pathologist; R. S. Cathcart, manager of farming operations; Geo. M. Parker, superintendent of farm where this tobacco was grown.

#### EASE OF CURING—TOP QUALITY LEAF

The outstanding features of this tobacco are: ease of curing to a rich lemon color, high yield, and top quality cigarette leaf. Golden Cure has led in our yield trials for the last three years.

Leaves are medium broad, averaging around 22 inches in length after curing, and are a little over half as wide as long. They are spaced medium close on the stalk or about 2½ inches apart, and this spacing is rather uniform from bottom to top. Plants will produce an average of around 24 leaves per stalk. Leaf growth habits of this variety will permit

[4] RIGHT: Dan Cannon, our North Carolina sales representative and Dr. Rogers are pleased with the close leaf spacing, productivity and type of Coker's Golden Cure tobacco.





spacing of plants about two inches closer together in the row and the rows about six inches closer than with other broad-leaf varieties.

#### WIDELY ADAPTED—UNIFORM RIPENING

Golden Cure has a good root system, providing maximum storm resistance and feeding ability. It will ripen and cure better on tobacco soils of the heavier or stiffer type than other broad-leaf varieties. It has rather high resistance to leaf spotting diseases usually encountered in wet weather or in late season. On average soils, about 1200 pounds of 3-9-6 fertilizer produces the maximum in yield and quality.

#### DESCRIPTION

WEIGHT—Extra high yield of top quality tobacco.

CURING—All primings very easy to cure to a rich lemon color.

LEAF—Medium broad leaf averaging 20 to 22 inches long and 10 to 12 inches wide. Spaced medium

close on the stalk, this spacing being uniform from bottom to top of stalk.

STALK—Medium sized stalk with good root system giving high storm resistance.

TEXTURE—Very good medium type.

DISEASE RESISTANCE—Moderate resistance to nematodes and soreshin; high resistance to leaf spot; not resistant to black shank.

UNIFORMITY—Very uniform in growth habits.

ADAPTABILITY—Grows well on all soil types throughout the flue-cured belt and better than most broad leaf varieties on the heavier type soils.

PRICES: \$3.00 per ounce, \$22.50 per half pound, \$42.00 per pound, postpaid.

BELOW: Dr. C. H. Rogers shows typical plant of Golden Cure to members of the sales department. That's Mr. Entzminger on left, our veteran salesman and tobacco seed specialist.

ON RIGHT—BELOW: One of the important features of our Golden Cure variety is that all primings are easy to cure to a rich lemon color.

PHOTO RIGHT HAND PAGE: Golden Cure has large, broad leaves which grow with a high arch, allowing close spacing in the drill for maximum plants and yield per acre. Dr. C. H. Rogers (left) points out this characteristic to Dr. J. W. Neely, our Director of Plant Breeding and Agricultural Research.



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## COKER'S GOLDEN HARVE

1951 BREEDER'S REGISTERED SEED

Coker's Golden Harvest was offered to the growers in the flue-cured belt for the first time in 1948 and since then has established itself as a top money maker from Florida to Virginia. Each season since the release of this variety, we have received many outstanding reports from growers over the entire belt. The years spent by our tobacco breeders in developing Golden Harvest are paying big dividends to our customers each year.

#### RESELECTED ON NEMATODE INFESTED SOIL

Our Golden Harvest '51 is from a selection out of a cross between Gold Dollar and 400. Twelve generations of inbreeding and reselecting on root knot and nematode infested soils has given this variety considerable resistance to these diseases. Golden Harvest '51 also has fair tolerance to such soil borne diseases as soreshin and some leaf spots.

#### **EXCELLENT QUALITY AND HIGH** YIELDS PER ACRE

This variety has long, broad leaves spaced medium close on the stalk. It cures easily to a good lemon color with the body of the Gold Dollar parent combined with the best qualities of the 400 line. Its vigor and nematode resistance allow full and normal development of the leaf, uniform ripening, and sys-

tematic harvesting. Golden Harvest '51 will stand in the field longer without burning than most other standard varieties. The leaves grow with a yellowish cast and should always be allowed to fully ripen before cropping. The average yield for this variety since its release has been higher than that of either of the parents and considerably more than our standard varieties in our tests to date.

#### WIDELY ADAPTED

Golden Harvest '51 plants are slightly taller than Gold Dollar, averaging from 20 to 22 leaves per plant. The top leaves are better than average in size. It has a high degree of storm resistance and plantings from Florida to Virginia have shown that it is adapted to the entire flue-cured belt.

#### NOTES OF IMPORTANCE

- 1. Golden Harvest '51 does not have any resistance to black shank and should never be planted on soils which are infested with this disease. If you have a disease problem on your farm, we recommend that you consult your local county agricultural agent and be sure what your trouble is before planting your beds.
- 2. Golden Harvest was bred to stand in the field longer without burning than most other varieties. This is a most desirable quality, especially for those farmers who are limited in barn room and for all growers during a period of extremely hot, dry weather. We wish to caution growers, how-

Coker's Golden Harvest has established itself as a top money maker over the entire flue-cured belt. Mr. B. F. Williamson, Jr., outstanding tobacco grower of Darlington County, is shown in his fine crop of Golden Harvest.

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ever, that this variety grows with a yellowish cast and care should be taken to be sure that leaves are fully ripened before cropping. The leaves are ripe when they break clean from the plant and the green fades from the veins.

#### DESCRIPTION

WEIGHT—A high producer of quality cigarette tobacco.

CURING—Cures easily about like its Gold Dollar parent.

LEAF—A large, broad leaf from 18 to 22 inches in length and 10 to 12 inches in width.

STALK—A medium large stalk that is stiff and storm resistant.

**TEXTURE**—The leaf is of medium texture with average size ribs.

DISEASE RESISTANCE—Relatively high resistance to root knot and meadow nematode. Some tolerance to soreshin and leaf spot.

**UNIFORMITY**—Golden Harvest '51 is very uniform in all growth characteristics.

PRICES: \$3.00 per ounce, \$22.50 per half pound, \$42.00 per pound, postpaid.

BELOW: Tobacco buyers pay top prices for quality cigarette tobacco. The bidding is fast and spirited and the prices high as Mr. Shady R. Floyd of Florence County sells a row of Golden Harvest.



ABOVE RIGHT: Mr. Carl B. Reaves of Loris, South Carolina, has found Golden Harvest to be a top producer of quality cigarette leaf. His 1951 crop of 4.7 acres averaged 1783 pounds and sold for \$1097.66 per acre.







The entire family is interested in the tobacco sale. Miss Diane Floyd, daughter of Mr. Shady R. Floyd, and Miss Ina Mae Thomas, were very pleased with the price this pile of Golden Harvest brought.



Mr. Don Ayres of Nichols is a veteran when it comes to growing fine tobacco. Golden Harvest was his first choice, and we feel the picture explains

Mr. M. C. Strickland was more than pleased with the fine crop of Golden Harvest that he produced on his form in Horry County.



Moore County (North Carolina) farmer, O. B. Page, Route 2, Vass, North Carolina, shown in his field of Golden Harvest.





## Coker's GOLDEN WILT '51

1951 BREEDER'S REGISTERED SEED

RESISTANT TO GRANVILLE AND FUSARIUM WILT

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Coker's Golden Wilt has been reselected for 10 generations out of a cross involving Virginia Bright Leaf and 448A, an introduction by the Tobacco Division of the U. S. Department of Agriculture from South America. The leaves have a slightly puckered appearance with a tendency to smooth out as they ripen. They are above average size with a fairly broad tip and medium narrow at the point of attachment to the stem. The spacing of these leaves is relatively close on the stalk, averaging from 20 to 24 leaves on a 4 to 5 foot plant. Plants are medium to late in blooming.

## EXCELLENT QUALITY AND WEIGHT COMBINED WITH DISEASE RESISTANCE

Coker's Golden Wilt is resistant to Granville wilt and has also shown good resistance to Fusarium wilt which is spreading rather rapidly, especially throughout the border belt in both Carolinas. In addition to resistance to these diseases, it also carries some factors for mosaic resistance and comparatively high nematode resistance. The leaf cures to a rich lemon color, is of good crepe-like texture, medium bodied, and is a desirable cigarette type. In our variety tests for the past four years, this tobacco has been one of the top producers in pounds and dollars per acre.

#### NOTES OF IMPORTANCE

1. Care should be exercised not to over fertilize this variety. On heavier soils excessive rates of fertilization tend to cause this variety to grow too large and produce a lower quality tobacco than it normally should. The leaves should always be primed when they have a yellow or ripened appearance in the field. In curing this variety we find that it ordinarily takes from 12 to 18 hours less than other standard varieties. Golden Wilt colors rapidly and we find that it is not necessary to run at the coloring temperature as long as is normal with other tobaccos. In planting this variety we recommend that your acreage be large enough so that you can cure it separately

BELOW LEFT: Coker's Golden Wilt is showing its high degree of resistance to Granville wilt in this field which is heavily infested. The nonresistant row on the right has been entirely destroyed by this disease. This photo was taken in our breeding nursery on Mr. O. B. Umstead's farm near Durham, North Carolina.

from the rest of your crop if you are growing other tobaccos. Golden Wilt does not cure well with most of the standard types as it colors very rapidly and cures more easily than average.

2. Although this variety was bred and grown on Granville and Fusarium wilt infested soils and has proved to have high resistance under all growing conditions experienced thus far, it is possible that variations might occur in these disease producing organisms which would possibly result in an infection causing some plants to die. Climatic and soil conditions often tend to aggravate these diseases and are sometimes responsible for this trouble. It is known that new races or strains of disease organisms develop from time to time and it is possible that a new strain may occur without our knowledge.

3. Golden Wilt is NOT resistant to black shank.

#### DESCRIPTION

WEIGHT—Golden Wilt has been one of the top producers on both diseased and non-diseased soils.

CURING—The ripe leaf cures to a rich lemon of excellent quality and texture.

STALK—Medium in size with good storm resistance.

LEAF—A comparatively broad leaf with a rather blunt tip, puckered between veins, smoothing out somewhat at time of ripening. A chemical analysis made by one of the leading cigarette companies has shown this tobacco to be a desirable cigarette type.

DISEASE RESISTANCE—High resistance to Granville and Fusarium wilts. High tolerance to nematodes. Golden Wilt is not resistant to black shank.

ADAPTABILITY—Adapted to all soil types throughout the tobacco belt with the exception of extremely heavy types.

PRICES: \$3.00 per ounce, \$22.50 per half pound, \$42.00 per pound, postpaid.

Mr. D. B. Holmes (center) and Mr. Lucien Norris (on right) of Loris, have found that they can produce high yields of good quality tobacco even on soils heavily infested with Granville and Fusarium wilt if they plant Coker's Golden Wilt.







Mr. J. V. Williamson, plant breeder in charge of our tobacco seed production, places bag on seed head of Mammoth Gold tobacco.

### Coker's

## MAMMOTH GOLD

1951 BREEDER'S REGISTERED SEED

Coker's Mammoth Gold originated from a selection out of a cross of Gold Dollar and Yellow Mammoth. It combines the best features of each of its parents, giving the grower high yields, good quality, and wide adaptability.

Mammoth Gold is one of the most outstanding of the medium leaf varieties as shown by its wide acceptance by growers throughout the flue-cured belt. This year's Mammoth Gold is an early maturing variety with unusual vitality. The sixteen years that have gone into the inbreeding and selecting have intensified the good qualities that this tobacco has long been known to possess. The breeder registered seed we are offering our customers this season are the nearest approach we have been able to make in this variety towards our goal of an ideal cigarette tobacco.

#### DESCRIPTION

WEIGHT-Among the best of the medium leaf tobacco varieties.

CURING-One of the easiest to cure of all the pedigreed varieties. Holds its color well and cures out to a rich lemon color.

LEAF-A medium sized leaf rounding out to a good tip. STALK—The stalk is medium to tall with well-spaced leaves. TEXTURE-Medium to smooth texture with average ribs. SEASON-Matures about a week earlier than most varieties. PRICES: \$2.00 per ounce, \$15.00 per half pound, \$28.00 per

pound, postpaid.

Coker's

## GOLD DOLLAR

1951 BREEDER'S REGISTERED SEED

#### Coker's

## YELLOW MAMMOTH

1951 BREEDER'S REGISTERED SEED

Coker's Gold Dollar is one of the best-known of all the cigarette type tobaccos. Its remarkable uniformity of type, size, and shape of leaves, height of plant, and wide adaptability have made this one of the most widely planted of the medium leaf varieties. The Gold Dollar we are offering for 1952 is the best strain we have ever offered. It has shown more tolerance to root knot and meadow nematode than any of our past strains. Our latest strain has been refined and improved by more than twenty generations of inbreeding and selecting. This variety should be allowed to fully ripen before harvesting.

#### DESCRIPTION

WEIGHT-Combines good weight with desirable quality. CURING—Easy to cure. Very few blue butts. LEAF—Long, medium broad; fills out to a good tip.

STALK-Medium to tall.

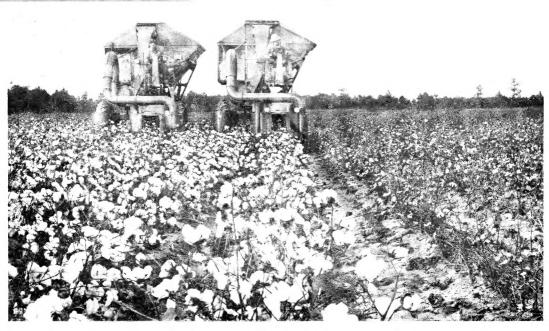
TEXTURE-Among the best of the medium leaf tobacco varieties.

ADAPTABILITY—Has given satisfactory results on most types of tobacco soil in the flue-cured belt.

PRICES: \$2.00 per ounce, \$15.00 per half pound, \$28.00 per pound, postpaid.

Yellow Mammoth is one of our oldest varieties which is especially well suited for planting on medium to heavy sandy loam soils. This tobacco has a medium stalk, long, medium broad leaves well spaced on the stalk. It combines good weight with quality and cures to a rich lemon color. Our pedigreed strain is a distinct improvement on the general strain. It is important that care be taken to see that this tobacco is fully ripe before gathering as it grows with a yellowish cast.

PRICES: \$2.00 per ounce, \$15.00 per half pound, \$28.00 per pound, postpaid.



Picking Coker 100 W. R. cotton with spindle-type cotton harvester on Coker Farms near Hartsville, S. C.

## POST CARD

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## Certified VIRGINIA GOLD

Virginia Gold was developed at the Virginia Agricultural Experiment Station, Chatham, Virginia. It is from a cross of Yellow Special and Cash. This variety grows medium tall, has broad leaves of good length that are spaced medium close on a large stalk. One of its outstanding qualities is its vigor and ability to grow off quickly after transplanting into the fields. Since the release of this variety our yield tests have shown it to be one of the top producers of good quality cigarette leaf. It is adapted to a wide range of soil conditions and cures to a rich lemon or orange color when allowed to fully ripen.

PRICES: \$2.00 per ounce, \$15.00 per half pound, \$28.00 per pound, postpaid.



Virginia Gold is a heavy producer of good cigarette leaf. Note the vigor

# Certified 402

## Certified BROADLEAF HICKS

This variety was bred by the North Carolina Tobacco Experiment Station at Oxford, North Carolina. It is a selection from a cross of Jamaica Wrapper and 400. Our 402 seed were produced on our farms from planting stock which we originally secured from the North Carolina Tobacco Experiment Station. 402 possesses the vigor and size of the 400 parent. The leaf is of the Jamaica type, but much broader and when cured is relatively thin and predominantly luggy. The leaves are spaced a medium distance on the stalk and grow with a yellowish cast which should be taken into consideration with harvesting.

PRICES: \$2.00 per ounce, \$15.00 per half pound, \$28.00 per pound, postpaid.

Coker's Broadleaf Hicks is a selection made by our breeders out of the standard Broadleaf variety. We have found this selection to be superior in quality and yield to the standard line.

The long, medium broad leaves cure to a bright lemon color. This variety has grown in popularity in certain parts of the North and South Carolina fluecured areas, and our work with this tobacco has been directed towards giving these growers the best selection possible in this variety.

Coker's Broadleaf Hicks is uniform in all growth characteristics, has a medium size, stiff stalk, and is adapted to practically all soil types throughout the flue-cured belt.

PRICES: \$2.00 per ounce, \$15.00 per half pound. \$28.00 per pound, postpaid.

EDGAR H. LAWTON

ROBERT R. COKER VICE-PRES. & SECRETARY

# COKERS/EDIGREED SEED COMPANY

DAVID R. COKER (1870-1938) FOUNDER



HARTSVILLE, SOUTH CAROLINA THE GUARANTEE OF QUALITY

# TOBACCO SEED PEDIGREED 1952 Season COKER'S



Our new metal tobacco seed container first introduced in 1948, has met with the approval and satisfaction of our customers and seed dealers. Safety sealed for your protection—resistant to moisture, insect and mice damage. Our Red Heart trade mark is your guarantee of quality.